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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,621	07/25/2003	Toshiro Anraku	12014-0019	9370
22902	7590	03/14/2006		
CLARK & BRODY 1090 VERMONT AVENUE, NW SUITE 250 WASHINGTON, DC 20005			EXAMINER DUNWOODY, AARON M	
			ART UNIT 3679	PAPER NUMBER

DATE MAILED: 03/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/626,621	Applicant(s) ANRAKU ET AL.	
	Examiner Aaron M. Dunwoody	Art Unit 3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-7 and 9-12 is/are pending in the application.
- 4a) Of the above claim(s) 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-7,9,10 and 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/3/2006 has been entered.

Election/Restrictions

Newly submitted claim 11 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: The original invention acted on the merits was not a method of drilling

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 11 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 1-3, 6-7, 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawashima (US. 4,871,194) in view of Bestolife article and US patent 6679526, Yamamoto et al.

In regards to claims 1-3, 6-8 and 10, Kawashima et al disclose the claimed device with a threaded joint for steel pipes comprising a pin 18 and a box 20 each having a contact surface including a threaded portion 10 and an unthreaded contact portion 12, wherein the contact surface of at least one of the pin and box is coated with a metallic undercoating layer 16 and a lubricating coating layer thereon (column 4, lines 40-45), the undercoating layer has a porosity of 5-80% (column 4, lines 35-40) and a thickness of 1-30 micrometers (column 3, lines 45-55), the lubricating coating layer being a liquid lubricating coating with a total thickness of the undercoating layer and the lubricating coating layer less than 100 micrometers. However, the lubricating coating is said (column 4, lines 40-45) to contain heavy metal powders.

It would have been obvious to a one having ordinary skill in the art at the time the invention was made to substitute the lubricant of the Kawashima et al. coupling with the lubricant thread compound Bestolife 2000 NM which does not include heavy metals such as taught by the Bestolife web site in order to protect the environment from excess lubricant containing heavy metals. Further, it would have been obvious since it has been held that omission of an element and its function in a combination where the remaining elements perform the same functions as before involves only routine skill in the art. In re Karlson, 136 USPQ 184.

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Yamamoto et al teaches the undercoating layer being formed of a metal selected from Cu, Ni, Sn, Cr, Co, precious metals, and alloys thereof (col. 1, lines 54-59). As Yamomoto et al relates to threaded pipe joints, it would have been obvious to one having ordinary skill in the art at the time the invention was made to fabricate the undercoating layer from of a metal selected from Cu, Ni, Sn, Cr, Co, precious metals, and alloys thereof, since it was known in the art that the undercoating layer can formed of a metal selected from Cu, Ni, Sn, Cr, Co, precious metals, and alloys thereof.

Further, Yamomoto et al presents that it is known in the art to provide a threaded tubular coupling with lubricant thread compound that does not include heavy metals due to environmental concerns (col. 2, lines 9-21).

- As to claim 2, since the same material for the undercoating is being used (column 3, lines 45-50) the material inherently would provide the same hardness of 50-250 Hv. As to claims 3 and 7, see all of column 3 continuing to lines 1-5 of column 4 which indicate the undercoating layer is formed by blast coating. As to claims 4 and 8, see column 3, lines 45-50, which indicates the undercoating layer is formed of metal selected from Zn or Al or the like. As to claims 6 and 10, Kawashima discloses using a binder in the solid lubricant coating, the binder being organic or inorganic. As to claim limitation that the threaded joint is used at high temperatures (intended use). The lubricating coating layer has a thickness and the metallic under coating layer has a thickness.

Claims 5 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over US. patent 4,871,194 to Kawashima in view of Bestolife article (Bestolife

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2000 NM, 12-01-1998, www.bestolife.com) and Yamomoto et al as applied to claims 1-3,6-7 and 10 above, and further in view of U.S. patent 3,625,893 to Brook.

As noted above the combination of Kawashima et al. and Bestolife discloses the claimed invention except for the particular lubricant of a basic metal salt of an organic acid. Brook discloses such a lubricant (column 2, lines 15-25). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the lubricant of Brooke having a basic metal salt of an organic acid as the lubricant compound of Kawashima et al. in order to provide -further corrosion resistance and further, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Response to Arguments

Applicant's arguments with respect to claims above have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron M. Dunwoody whose telephone number is 571-272-7080. The examiner can normally be reached on 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on 571-272-7087. The

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fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Aaron M Dunwoody
Primary Examiner
Art Unit 3679

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